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The rural community sustainable development portal – towards sustainable knowledge management and development

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BACKGROUND

Between the years 2008 and 2010 CSIR Built Environment embarked on a joint project with the Walter Sisulu University (WSU) to develop a rural community sustainable development portal. The portal provides a point for interaction, dialogue and exchange of experiences, practices and success stories in rural areas of developing countries. The vision of the rural development portal is to provide leadership in rural development matters through focusing on developing countries.

The portal aims to be a prime rural and development knowledge and solutions resource site for Africa and the developing world. This should ultimately facilitate the development of projects and programmes that transform rural spaces, cultures and people from poverty to prosperity through championing and fostering inclusive rural development agendas.

KNOWLEDGE TOOL

Officials in technical positions and decision-makers need tools that enable them to access the right information to effectively discharge their mandates. Such a tool could, for example, also enhance sharing of experiences, minimise duplication as well as assist in building capacity. CSIR Built Environment previously developed such a knowledge management tool in the form of a portal – the Rural Accessibility Planning Portal [RAPP] geared towards the rural transport sector (i.e. from 1996) (Moeketsi et al., 2005). As previously configured, RAPP contained features as depicted in **Figure 1**.

Figure 1: RURAL Access Planning Portal

An objective of a CSIR project was to upgrade the RAPP into a sustainable rural community development portal. A number of objectives motivated the need to establish an authoritative source (portal). For rural planning and development stakeholders, it is critical to have access to such a source of information on the rural development domain covering transportation, water and sanitation, rural energy and supply, geo-ICT information, indigenous knowledge system, and future rural science.

APPROACH AND METHODOLOGY

To create appropriate sustainable rural development community portal service systems, a variety of approaches and methodologies were followed. The design science paradigm, behavioural science, rural living labs approach, service system and studio developmental methodology were utilised in generating the project product offering (Hevner et al., 2004; Mulder, 2008; Muniafu, 2007).

CURRENT ARCHITECTURE AND DESIGN

The portal has been developed and runs on an open-source software platform. The portal is user-friendly and compatible with most computer operating systems. It has a number of features for encouraging users to provide input and feedback regarding performance. **Figure 2** presents a glimpse of the front-end interface portal webpage. The portal is accessible on www.ruralportal.co.za, due to be changed to www.ruralportal.org.

At the 4th Annual Rural Development Conference a resolution was made that the rural development portal project be implemented, taking into account the need to balance academic demands with rural development community needs.

In 2009, during the 5th Annual Rural Development Conference, the portal was successfully launched in Mthatha at WSU in front of over 500 conference delegates on the Digital Doorway facility to allow access and use by the largest possible number of users. A Digital Doorway is a robust multimedia terminal that houses a computer. This is important in eradicating the digital divide and providing access to computer-illiterate communities. Digital doorway website: www.digitaldoorway.co.za.

The rural development portal is therefore a project that represents work in progress. The adopted approach is to improve and perfect the portal as we move ahead. Add-ons are essential to make the site competitive and the system much more sustainable for example with the inclusion of a WIKI system, banner management, other languages, and project management.

Figure 2: Rural Community Sustainable Development Portal

CONCLUSION

When mature, the site is expected to be recognised as a source of information for rural and development solutions customised for the African market. Currently the website (www.ruralportal.co.za) is active and operational. This base site has the capability to add applications onto site as requested by users, the WSU and the CSIR. Implementation of further applications will involve new developments, which can be catered for under the proposed second of this project.

The robustness of the portal derives from the fact that it has a number of features to encourage users to provide input and feedback regarding performance. Taking the developmental approach, the next phases, such as funding for portal sustainability, require the establishment of strategic partnerships with institutions and departments such as the Development Bank of Southern Africa, the Department of Rural Development and Land Reform, the Department of Traditional Affairs and Cooperative Governance, and the World Bank.

This project is expected to assist decision-makers and potential donors and or project sponsors to make informed positive decisions towards alleviating some of the critical problems and issues facing people living in the rural communities, particularly in developing countries.

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